

CLAIMS

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1. A method of copying items implemented in a computer, the method comprising creating a process if an item to be copied is a directory; and copying the item if the item is a file.

2. The method of Claim 1 further comprising:

the process performing the act of creating or copying with another item in
10 the directory.

3. The method of Claim 1 further comprising, after the copying:

repeating the act of creating or copying with another item.

15 4. The method of Claim 1 further comprising, prior to the creating:

comparing a current number of processes started for copying with a limit;
and

waiting if the current number is greater than or equal to the limit.

20 5. The method of Claim 1 further comprising, prior to the copying:

increasing from a default limit on a resource to a maximum limit for the
resource.

6. The method of Claim 5 wherein:

25 the resource is number of open files.

7. The method of Claim 5 wherein:

the resource is file size.

8. The method of Claim 5 wherein:

5 the resource is memory.

9. The method of Claim 8 wherein:

the memory is organized as a stack.

10 10. The method of Claim 8 wherein:

the memory is organized as a heap.

11. The method of Claim 1 wherein the copying comprises:

transferring data from the file into a temporary buffer;

15 locking the temporary buffer; and

invoking a direct memory access (DMA) process for making a copy from
the temporary buffer.

12. The method of Claim 1 further comprising, prior to the copying:

20 checking if the item is a link to itself; and

performing said copying only if the item is not a link to itself.

13. The method of Claim 12 wherein:

the checking includes a string comparison operation.

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14. The method of Claim 1 further comprising, during the copying:

sending an email message if a resource at a destination is full.

15. The method of Claim 14 further comprising, during the copying:
waiting to be restarted subsequent to sending the email message.

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16. The method of Claim 15 wherein said waiting comprises:
sending a signal to self to suspend execution.

- 10 17. The method of Claim 14 further comprising, during the copying:
recopying said file from beginning, on being restarted.

- 15 18. The method of Claim 14 further comprising:
identifying an email address from a password file based on an identity of a user that started the process of performing the creating or copying.

19. The method of Claim 1 wherein:
said creating is performed only if said directory is not a current directory and not a parent directory.

- 20 20. A method of copying files implemented in a computer, the method comprising:
increasing from a default limit on a resource to a maximum limit for the resource; and
copying a file.

- 25 21. The method of Claim 20 wherein:
said resource is one of (number of open files, file size, and memory).

22. A method of copying files implemented in a computer, the method comprising:

- 5 transferring data from the file into a temporary buffer;
 locking the temporary buffer; and
 invoking a direct memory access (DMA) process for making a copy from
the temporary buffer.

23. The method of Claim 22 further comprising, prior to the transferring:

- 10 checking if the file is a link to itself; and
 performing said copying only if the file is not a link to itself.

24. A method of copying files implemented in a computer, the method comprising:

- 15 copying a file; and
 sending an email message if a resource at a destination is full.

25. The method of Claim 24 further comprising:

- waiting to be restarted subsequent to sending the email message.

20 26. The method of Claim 24 further comprising:

- identifying an email address from a password file based on an identity of a
user that started the copying.

27. A method of copying files, the method comprising:

- 25 starting a process for copying a file; and
 receiving an email message if a resource at a destination is full.

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28. The method of Claim 27 further comprising:

changing the resources at the destination in response to the email message;

5 and

restarting the process.

29. An apparatus for copying items, the apparatus comprising

means for creating a process if an item to be copied is a directory; and

10 means for copying the item if the item is a file.

30. The apparatus of Claim 29 further comprising:

means for sending an email message if a destination disk is full.

15 31. The apparatus of Claim 29 further comprising:

means for increasing a limit on a resource to maximum.

32. The apparatus of Claim 29 wherein said means for copying comprises:

means for using a temporary buffer; and

20 means for using direct memory access (DMA).

33. The apparatus of Claim 29 further comprising:

means for checking if the item is a link to itself.

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